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A Study to Determine the Percentage of Old Dominion University Technology Education Graduates who are still Involved in the Education Field

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**A STUDY TO DETERMINE THE PERCENTAGE OF
OLD DOMINION UNIVERSITY
TECHNOLOGY EDUCATION GRADUATES WHO
ARE STILL INVOLVED IN THE EDUCATION FIELD**

A Research Paper

**Presented to the Graduate Faculty of
the Department of Occupational and Technical Studies
at Old Dominion University**

**In Partial Fulfillment
of the Requirements for the
Master of Science in Education Degree**

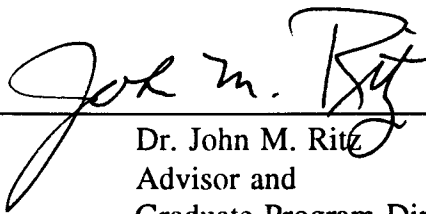
By

William L. Lucas, Jr.

August, 1994

SIGNATURE PAGE

This research paper was prepared by William L. Lucas, Jr. under the direction of Dr. John M. Ritz in OTED 636, Problems in Education. It was submitted to the Graduate Program Director as partial fulfillment of the requirements for the Degree of Masters of Science of Education.

Approval By:  7-6-94
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Graduate Program Director
Date

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I would like
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-William L. Lucas, Jr.-

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CHAPTER I

INTRODUCTION

Technology, one of the most ambiguous words in the English language, is used to describe new technical advancements that occur in the world.

Technology means something different to each person in our society. When mentioned, one may think of a computer, the space shuttle, a FAX machine, or a cellular phone to represent technology. All of these things do represent a piece of what technology is made up of. We must realize that we live in a rapidly changing world, and most changes today involve some aspect of technology. In order to be an active member of society, adults and children alike must attempt to stay abreast of these new technologies and to understand, evaluate and choose to use as many as determined effective.

The education field in the United States has set aside one division in its curriculum to deal with our technological world. It is appropriately called technology education. The technology education teacher is solely responsible in their school for producing a technologically literate student body. The scope of a technology education teacher's content, that he or she teaches, is tremendous and constantly changing. The content is controlled by the changing technology in society. The challenge to try to keep up-to-date with technological change is not easily accomplished. The traditionally high cost of

technology is often times too much for most school budgets to absorb and in turn has a major affect on teaching technology.

Many technology teachers make the decision to leave the teaching profession or choose not to teach directly out of college. These teacher's decisions are often based on many of the factors discussed previously.

Technology education can be one of the most exciting subjects to teach to students. When teachers are faced with limiting factors such as lack of funds or lack of administrative support, the excitement of teaching is lost and other career options are considered.

Statement of the Problem

The problem of this study was to determine the percentage of Old Dominion University technology education graduates who are still involved in the field of education. Included in this study were technology education graduates from 1983 to 1993.

Research Goals

In order to guide this study to determine the percentage of Old Dominion University technology education graduates involved in education after graduation, these questions were posed.

- 1) What are the reasons that technology education teachers remain in the teaching field?

- 2) What are the reasons that technology education teachers leave the teaching field?
- 3) What career paths are former technology education teachers pursuing?
- 4) What improvements can be made to retain Old Dominion University technology education students in the education field?

Background and Significance

While the teaching profession is gaining public support to become recognized as a true profession, there are still many other problems that linger and are overlooked. In determining the percentage of Old Dominion University technology education graduates still in the teaching profession, several other factors were considered to help evaluate the results of the study. In the past, the teaching profession has suffered teacher shortages due to uncompetitive salaries and poor benefits. Today, the teaching profession is finally beginning to show promise as a respectable way to earn a living. In a period where the economy is unstable, the teaching profession proves to be one of the few secure professions.

We can for the most part set aside the issue of monetary compensation as being a problem in education. Many of the problems that plague the education field today are societal based. What is the teachers job composed of today? Schools of the 1960's and prior had far less responsibility in teaching children than do today's schools. Today, for the first time in history, one hundred percent of the population has the opportunity to receive public

education; it is their right (Cole and Walker, 1989, p. 8). This right causes teachers to be responsible not only for teaching the course content to each student, but also teaching morals, values, and discipline to the students who come to school without them. Cole and Walker (1989) stated: "*Society washes its hands of the education of its young and tries to make teachers solely responsible, when in many cases, the problems are of society and require social solutions*" (p. 5).

Reyes (1990) divides educational reform down into two domains:

- The need to improve teacher training and certification.
- The desire to eliminate poor working life and career conditions once hired into the school system (p. 23).

The need to improve teacher training and teacher certification are being met in technology education through accreditation standards. However, technological content is constantly changing. By the time someone is technically qualified for the field, their knowledge may already be obsolete. In order for 21st century technology teachers to deal with this, they must be able to teach something they did not learn during their initial preparation. Teachers must teach students to be comfortable with change; this may be more important today than the "three R's".

Eliminating poor working life and career conditions is another difficult problem to solve for technology teachers. The cost of technology is usually high. Purchasing up-to-date technology is hard for most school systems, but

teaching the same technology from a book is even harder. Somewhere along the line society needs to realize that students today are the workers of tomorrow, and without proper equipment there is no way to adequately produce technologically literate students that our society requires.

Even with all the problems associated with the teaching profession, we must recognize that no one is forced to be a teacher. All professions have advantages and disadvantages that attract some and drive others elsewhere. The interpersonal theme, the attraction of working with people, attracts many people to the teaching profession. This alone may be enough for some. Other people may appreciate the time spent away from work as opposed to other professions. The need for this study is important to determine how past Old Dominion University technology education graduates have dealt with the teaching field. This will help faculty of Old Dominion University's technology education program to re-think the preparation of, and better prepare them to encounter such problems as they enter the teaching profession.

Limitations

The following limitations were recognized to have an effect on this

- study:
- 1) The population of this study was limited to Old Dominion University technology education graduates from the years of 1983 to 1993.
 - 2) The response to the survey used was a limiting factor to the study.

Assumptions

The results of this study were based on the following assumptions:

- 1) It was assumed that all of the persons surveyed would respond truthfully to the questions asked.
- 2) Teachers can evaluate their personal choices for remaining in the teaching profession or choosing to pursue other careers.

Procedures

In order to conduct this study, the researcher had to obtain the names of technology education graduates from the last ten years. A survey was developed and distributed, including a cover letter and a stamped return envelope. The questions on the survey were developed with the intention of answering the research goals previously listed. The information collected was used to determine whether changes to the present Old Dominion University technology education curriculum are needed. The project took the form of a descriptive study.

Definition of Terms

The following is a list of terms found within this study that may have special meaning. To ensure the proper understanding of each term, refer to the following definitions:

- 1) **Technology** - a. The applied science (Webster's 1984), b. Description of any new technical development in fields including,

but not limited to, electronics, communication, production, and transportation that extend human capabilities.

- 2) **Technology Education** - The school discipline for the study of the application of knowledge and resources to solve problems and extend human potential with the content consisting of past, present, and future technological advancements (The Technology Education Curriculum K-12, 1992, Virginia council on technology education for the 21st century, p. 6)
- 3) **Career path** - Jobs held by a person over time that are chosen selectively to produce success in later life.
- 4) **Retention** - the ability to retain or hold something in a particular position by some means.

Summary and Overview

Chapter I has dealt with the introduction to the field of technology education teaching including some of its benefits and downfalls. The study was designed to answer the question of how many Old Dominion University technology education graduates are still teaching in the education field. The collection of the data was obtained through a survey and undertaken in the form of a descriptive study.

Chapter II will provide a review of relevant literature on teaching.

Chapter III explains the exact methods and procedures that were used in collecting the data. Chapter IV is a summary of the findings that were obtained with the survey. The final chapter gives a summary of the study, conclusions, and recommendations for possible future studies in the subject area.

CHAPTER II

REVIEW OF LITERATURE

The literature reviewed in this section comes from current relevant literature on teaching. In this chapter you will find sections on teacher retention and improving teacher retention and job satisfaction.

Teacher Retention

Reasons for staying in the profession

The area of technology education is one of the most diverse areas of education in today's schools. In many areas of education a teacher may teach the same information year after year. This is not the accepted practice in technology education. Technology teachers are constantly refreshed with new and exciting information to teach. Technology teachers have the unique opportunity in their job to stay up-to-date with new technologies in communication, transportation and production. This is a task that most people have to take on during their free time in order to function in today's technical world. The technology education teacher is able to pass this new information along to students. The students are easily intrigued and often learn information and skills that their parents do not know. This is a very rewarding feeling for the technology teacher.

The advantages of teaching listed so far are mainly restricted to the technology teacher, but there are several other benefits or reasons common to all teachers that explain why teachers stay in the teaching field. As previously mentioned in the background and significance, the interpersonal theme of teaching draws and keeps many in the profession. Working with students and sharing knowledge with them is very rewarding.

Several other factors are responsible for retaining teachers in the teaching profession. One important reason is good administration. Administrators should realize that, as administrators, they may have an important effect on whether a teacher continues in the teaching field. Another factor has been found to be based on student enrollment (Theobald, 1989). Good enrollment gives a teacher a sense of job security and they are more apt to stay. Duffy and Matthes (1989) stated that career satisfaction was related to degree program completed (masters vs. bachelors) and to school locale (rural vs. suburban). Teachers with a lower level of educational training tended to stay in teaching along with suburban teachers. Also, teachers with more than ten years of experience and older in age were more likely to keep teaching. These factors were some of the main reasons found through research that teachers remain in their teaching positions.

Reasons for leaving the profession

In reviewing the literature, it was determined that considerably more has been written on why teachers leave the profession than why they stay. As was

mentioned earlier in the study, one of the main reasons for technology teachers leaving the teaching field is because of lack of resources or, more specifically, the lack of money. Keeping a technology lab up-to-date with state of the art equipment is very difficult for most school systems. It is very difficult for a technology teacher to teach new technologies from a book alone. Some teachers find the fight for money and the justification for equipment and supplies too stressful. Many get to the point where they feel their talents could be more useful elsewhere. This leads to the condition that effects all subject areas of teaching - - teacher stress and teacher burnout. Faber (1991) says that burnout occurs in highly motivated workers who react to stress by overworking until they collapse (p. 2). Teaching has become the profession that is most identified with this phenomenon and it is most likely the cause of many teachers leaving teaching. Weing (1985) indicated that task overload was rated highest by teachers and administrators for leaving the teaching profession. Lack of administrative support, budget restrictions, and teaching assignments (too many preparations, too many students) all contribute to task overload. Many teachers today are expected to do much more than teach their students. Paperwork and administrative duties that are placed on teachers cause added pressure.

Another reason contributing to teachers leaving teaching can be blamed on society. The children that are going to school today come with few morals, manners, or values. Society has elected the teacher rather than the parent to

be responsible for teaching these morals, manners and values (Cole and Walker, 1989, p. 5). This makes the teachers job to teach the subject matter even more difficult. Every year these factors become more an issue and cause many teachers to choose not to return.

One alarming statistic shows that as many as thirty percent of beginning teachers do not teach beyond two years, and as many as sixty percent do not teach beyond five years (Walker, 1992). The younger generation of teachers are shown to be the most likely to leave the profession. This is very detrimental to technology education because the more recent technology education graduates are the best qualified to teach the new technologies of today. Cohen (1990) indicated that out of the remaining teachers left in the field, only 18 percent had the intent to stay, all others had an intent to leave at some time in their careers.

Improving Teacher Retention and Job Satisfaction

It is very evident that teachers are faced with many stresses that make their job of teaching students very difficult. There are several suggestions that have been made in the literature to help alleviate these problems. Good administrative and faculty support in a school are keys to teacher retention. Ladastro (1991) stated that research shows that mentor programs improve teaching, raise teachers' self confidence, and increase teacher retention. These mentor programs would be used to provide assistance to beginning teachers to help ease the shock of paperwork confusion, administrative duties,

and teaching classes. The study also suggested that a major problem with the education students in college is that they find out too late in their college career that teaching is not for them. The main cause for this is that their classroom experience is done in their senior year of classes, and at this point a change of majors is too late. Cohen (1990) suggests the need during pre-service training for earlier classroom experiences and for early efforts at career awareness and exploration. Sweeney (1991) recommends that colleges need to help place recent graduates in teaching positions. This would help the new teacher to match career expectations with the right career. The college could also provide support and encouragement to new teachers during the early crucial years.

Hafner and Owings (1991) recommend that policy makers include recognizing the importance of making teaching more professional thereby enabling individuals to have a larger investment in their careers. The main reason this change has not already been made is due to society's view on teaching. Society is slowly beginning to realize the importance of teaching to the success of students in society. Once teaching is recognized as a professional career by everyone, qualified teacher retention will become much easier to find for our schools.

Another societal solution for retaining teachers would be to send children to school with better discipline skills. Responsibility to teach children discipline (manners, morals, and values) has slowly been shifted from the parents to the teachers (Cole and Walker, 1989, p. 5). This makes the teachers job of

teaching the subject matter very difficult, if not impossible. Teacher retention would improve dramatically if discipline problems were reduced in the classroom.

Summary

The role of the technology teacher is becoming very important to the future success of today's students. The present problems with teacher retention and job satisfaction need to be solved in order to keep new and qualified technology teachers in education. Teacher retention is very dependent on whether colleges, schools, and society will take the responsibility to help solve present problems in today's schools.

Chapter III

METHODS AND PROCEDURES

The following chapter contains the methods and procedures that were used within this study. The study's focus was to determine the percentage of Old Dominion University technology education graduates involved in education after graduation. The best way to determine this percentage was to contact Old Dominion University technology education graduates directly. A descriptive study using a survey questionnaire was conducted to collect this data. In this chapter the reader will find information on the population, instrument design, methods of data collection, statistical analysis, and a summary.

Population

Since the focus of the study was to determine information about Old Dominion University technology education graduates, the population consisted of Old Dominion University technology education graduates from 1983 to 1993. This ten year period contained 74 technology education graduates.

Graduates from this program may have slightly different backgrounds depending on when they completed their degrees. Graduates from the 1980's and prior actually obtained a degree in Industrial Arts. Industrial Arts was a

school curriculum that was designed to acquaint and teach basic skills that were associated with industry. The Industrial Arts curriculum originally sought to help students become familiar with aspects of the "Industrial Society" which they were growing up in. As we moved into what we call the "Information Society" today, the Industrial Arts curriculum quickly became obsolete. The technology education curriculum is designed to prepare today's students for our "Information Society". Industrial Arts teachers training was not as technologically advanced as present graduates from the technology education major, but all of these teachers are qualified to teach technology education in middle schools and high schools today. In the middle school, technology education is made up of three different courses. These courses are Introduction to Technology, Inventions and Innovations, and Technological Systems. In high school, technology teachers teach one or all of the following courses - - Technology Foundations, Technology Transfer, or Technology Assessment. In both middle school and high school, combinations of the approved technology courses may be taught, as well as other technology specific courses that encompass the ideas and methodologies of the approved courses.

Instrument Design

In order to collect the data to meet the needs of the study, an instrument was designed to address career related information related to the goals of the

study. A survey questionnaire was designed with closed-form and open-form questions to simplify the interpretation of the results.

The instrument asked questions to determine current career information. It sought information on current employment status, job satisfaction, and explanation for career changes. This section was intended to provide data that would lead to an understanding of teacher job satisfaction and to answer the research goals of the study which were:

- 1) What are the reasons that technology education teachers remain in the teaching field?
- 2) What are the reasons that technology education teachers leave the teaching field?
- 3) What career paths are former technology education teachers pursuing?
- 4) What improvements can be made to retain Old Dominion University technology education students in the education field?

A sample of the instrument is found in Appendix A.

Methods of Data Collection

To collect the data, the instrument was sent via U.S. mail to the selected population. A cover letter accompanied the survey. This letter explained, the intent of the study and why the participants were chosen as part of this study. A sample of the cover letter is found in Appendix B.

Finally, a follow-up letter was sent to each person surveyed. This letter served two purposes - - to thank any person surveyed for participating in the survey and as a reminder to those persons who had not returned the

questionnaire as of that date. For a sample of the follow-up letter, see Appendix C.

Statistics Analysis

To organize the results for analysis, the results were placed in a statistical format. Percentiles and means were used to analyze the data.

Summary

This chapter outlined the methods and procedures used in this study. To determine the percentage of Old Dominion University technology education graduates who are still involved in the education field, a questionnaire was designed, distributed, collected, and analyzed. Once the data was analyzed, conclusions were developed based on the collected data. The results could further be used for improved preparation of present and future Old Dominion University technology education graduates entering the field of education.

Chapter IV

FINDINGS

The intention of this chapter was to inform the reader of the information obtained from the survey conducted during the research. The problem of this study was to determine the percentage of Old Dominion University technology education graduates who are still involved in the field of education. Survey questions were designed to answer the research goals. Included in the survey were questions related to personal information to determine the demographics of the population. The first section of this chapter will describe the demographic information collected. The second section of this chapter will include information collected pertaining to the research goals.

Demographic Information From Respondents

The first six questions of the survey pertained to demographic information. The survey was sent to 74 individuals, which was the entire population. Out of the 74 individuals surveyed 44 people responded which was 60 percent of the population. The respondents were predominantly male. There were four females originally surveyed which made up five percent of the

population. All four females responded. Seventy males, which accounted for 95 percent of the population, were included; 40 responded. See Table 1.

TABLE 1

Gender of Respondents	Number Surveyed	Number Responded	Response Percentage
Male	70	40	57%
Female	4	4	100%
Total	74	44	60%

The most common age group for the respondents was age 30 or less. Sixty-six percent of the respondents fell into this age bracket. The age group of 31-40 was the next largest group which contained 25 percent of the respondents. The 41-50 year old age group was the smallest containing only nine percent of the respondents. See Table 2.

TABLE 2

Age Group	Respondents	Percentage
30 or Less	29	66%
31 - 40	11	25%
41 - 50	4	9%
Total	44	100%

Of the 44 respondents, 52 percent (23 people) were married. See Table 3. Seventy-five percent of the respondents still lived in Virginia (33 people). The other twenty-five percent (11 respondents) were living in states across the country. See Table 4.

TABLE 3

Marital Status	Respondents	Percentage
Married	23	52%
Not Married	21	48%

TABLE 4

Place of Residence	# of Respondents	Percentage
Virginia	33	75%
Non-Virginia	11	25%

The highest level of education completed by the respondents ranged from a bachelors degree to a masters degree. The bulk of the respondents (35 people out of 44) had earned a bachelors degree which was 80 percent of the total respondents. The remaining respondents (9 people) had achieved a masters degree which was 20 percent of the total respondents. No one that responded had achieved a doctorate degree. See Table 5.

TABLE 5

Degree Earned	# of Respondents	Percentage
Bachelors	35	80%
Masters	9	20%
Doctorate	0	0%

The number of years that each respondent had taught was collected in the survey. The number of years possible, ranged from 0-10 years. Several of the respondents (12 people) had never taught school after graduation and had therefore, chosen another profession (27 percent). Thirty-two of the respondents (73 percent) had taught or were still teaching. Teachers that had taught after graduation or were still teaching did so for a minimum of one year or no more than seven years. See Table 6.

TABLE 6

Years Taught	Respondents	Percentage
0	12	27%
1	6	14%
2	9	20%
3	4	9%
4	4	9%
5	4	9%
6	2	5%
7	3	7%
8	0	0%
9	0	0%
10	0	0%

Reasons for Remaining in the Profession

Following the demographic information, questions seven through twelve of the survey were structured to collect information pertaining to the participants

career paths and their opinions of the teaching profession. Question 7 aimed at providing information on why technology teachers remained in the teaching profession. Persons surveyed had eight choices of answers that were provided and three blanks labeled as "other" that could be filled in as needed. Each participant could choose as many choices as they felt applied to them. In order of importance 22 respondents (50 percent) indicated that *passion for teaching*, and 22 respondents (50 percent) said that *enjoying children*, were the main reasons for their remaining in the teaching profession. The next highest reason for remaining in the teaching profession was having the *summers off*, which was chosen by 20 respondents (45 percent). Also, 13 people (30 percent) selected *benefits*, 12 (27 percent) chose *administrative support*, 10 (23 percent) picked *salary*, and eight (18 percent) selected *free time* as reasons for their remaining technology teachers. One person indicated that *limited responsibility* was a reason for remaining in the field. Several teachers also indicated that working with technology, teaching technology, or being in contact with new equipment involved in technology contributed to their remaining technology teachers. See Table 7.

Reasons for Leaving the Teaching Profession

Question 8 of the survey provided information on why teachers have left or are planning to leave the teaching profession. The response on this question was fairly low coinciding with the high response rate on the previous

TABLE 7

* Reasons for remaining a technology teacher	Number of Respondents	Percentage
Passion for teaching	22	50%
Enjoy children	22	50%
Summers off	20	45%
Benefits	13	30%
Administrative support	12	27%
Not enough room for advancement	12	27%
Salary	10	23%
Working with technology	10	23%
Free time	8	18%
Limited responsibility	1	2%

* Referring to question seven of the survey instrument.

question. Nine technology teachers (20 percent) did indicate that *salary* was or could be a reason for leaving the teaching profession. Equally contributing to teachers leaving or contemplating leaving teaching was the *lack of administrative support*, and *not enough room for advancement*. Each of these possibilities were chosen by five respondents (11 Percent). Other reasons selected for leaving or considering leaving teaching were the *lack of benefits*, chosen by three people (seven percent), and *not enough free time*, selected by one person (2 percent). Other teachers indicated that starting their own business was a reason for their leaving. Another teacher indicated that

student's attitudes toward teachers and learning may contribute to their leaving the teaching profession. See Table 8.

TABLE 8

* Reasons for leaving or planning to leave the teaching profession	Number of Respondents	Percentage
Salary	9	20%
Lack of administrative support	5	11%
Not enough room for advancement	5	11%
Lack of benefits	3	7%
Starting their own business	2	5%
Not enough free time	1	2%
Students attitudes	1	2%

* Referring to question eight of the survey instrument.

Career Paths of Former Graduates

Question 9 was designed to determine what professions former technology education graduates were involved in if they had exited the teaching field or had never taught after graduation. Thirty-two (73 percent) of the 44 respondents were still involved in the teaching profession. Twelve (27 percent) of the respondents were involved in careers areas other than teaching. See Table 9. There were a number of differing jobs being held by technology education graduates. There were 20 different individual jobs that were listed by respondents in this section. These 20 jobs could be grouped into seven different career areas. Respondents were either in sales jobs, military or

TABLE 9

	Respondents	Percentage
Still involved in the teaching profession after graduation	32	73%
Exited teaching profession, or have never taught	12	27%

government jobs, production jobs, computer oriented jobs in business, trucking, security, or graduate school.

Question 10 of the survey asked if former technology education graduates would recommend the teaching profession to someone entering college, 32 (72 percent) respondents answered "yes" and the remaining 12 (27 percent) answered "no". They were asked to give reasons why they responded as they did. Respondents who answered "yes" gave many reasons for their choice. They recommended teaching because, it was very gratifying, exciting, well paying, a secure profession, and a way to make a difference in a child's life. Respondents who answered "no", and would not recommend teaching as a profession, did so for these reasons - - low pay, poor attitude of students, and political problems (red tape) associated with teaching.

Finally, the persons being surveyed were asked if the Old Dominion University Technology Education program adequately prepared them for the teaching profession. Thirty-eight (86 percent) of the respondents answered positively, and six (14 percent) indicated that it did not adequately prepare them.

Improvements to the Technology Education Program

The last question was left open to provide room for the respondent to suggest improvements for the Old Dominion University Technology Education Program. The 44 respondents suggested 23 possible improvements or areas that needed more attention. These suggestions are listed below.

1. Deal more with real students
2. Learn procedures to order supplies
3. Learn how to keep records for equipment
4. More computer experience
5. More on how to be a teacher, less emphasis on subject content
6. How to adapt curriculum for exceptional students
7. More attention to designated middle and high school courses
8. Strengthen interview skills
9. Improve job search skills
10. More hands-on, less lecture
11. Update methods class
12. Lengthen student teaching (more practical experience)
13. Update curriculum to better match school programs taught
14. How to manage students in a modular lab situation
15. Better preparation for National Teachers Exam
16. More electronics experience
17. Graduates leave knowing too little, about too much
18. Prepare for Technology Student Association involvement
19. Prepare for paper work that teachers will encounter
20. Stress classroom management skills
21. Produce usable lesson plans
22. Require more math for major
23. Include more engineering concepts

Summary

In conclusion, the questionnaire contained 12 questions. The questions were developed to attain information on demographics and to answer the

research goals. The findings of the survey were organized and presented in a format that would be easily understood by the reader.

Chapter V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

The problem of this study was to determine the percentage of Old Dominion University technology education graduates who are still involved in the field of education. This chapter summarizes the entire study, draws conclusions, and makes recommendations based on the findings.

The goals set forth at the beginning of the study were:

- 1) What are the reasons that technology education teachers remain in the teaching field?
- 2) What are the reasons that technology education teachers leave the teaching field?
- 3) What career paths are former technology education teachers pursuing?
- 4) What improvements can be made to retain Old Dominion University technology education students in the education field?

These goals were designed to help guide the research toward its purpose.

Many of the problem associated with teaching have been solved over the years. There are still many problems that effect the teaching profession, specifically the technology teacher profession. While determining the percentage of Old Dominion University technology education graduates still in the teaching profession after graduation, many other factors were examined.

With this study, solutions to problems in the technology teacher profession can be identified. Also, with this information, improvements could be made to the Old Dominion University technology education program. The ultimate result of this study is to better retain technology education teachers in the teaching field.

No study is 100 percent accurate unless everyone associated with the study is included in the survey and responds. Due to limitations this is rarely possible. This study had two such limitations which are listed below.

- 1) The population of this study was limited to Old Dominion University technology education graduates from the years of 1983 to 1993.
- 2) The response to the survey used was a limiting factor to the study.

The study was comprised of a specific group of people. The focus of the study was on Old Dominion University technology education graduates, therefore persons from Old Dominion University were chosen. Technology education graduates from a ten year period were selected. For accuracy, graduates from the most recent year of 1993 and back to 1983 were chosen. This group of years contained 74 people.

For data collection a survey was constructed. This survey questionnaire used open and closed-form questions to help answer the research goals. The survey sought standard demographic information and current career information. The instrument was mailed to the entire population via U.S. mail. A cover letter was included to explain the intent of the study. A follow-up letter was sent to each person surveyed to thank them and as a reminder for those

who had not yet returned their survey. Sixty percent of total persons surveyed responded. Percentiles and means were used to analyze the data after collecting all surveys that had been returned.

Conclusions

The conclusions of this study were based on the findings of the survey. The first section of the survey instrument provided demographic information. With the findings from this section, an average respondent can be described. The typical respondent was male, age 30 or less, and from Virginia. He/she had earned a bachelors degree in technology education and had taught anywhere from zero to seven years. While the average respondent varied slightly, the one described above had the most effect on the findings.

The first goal asked, ***What are the reasons that technology education teachers remain in the teaching field?*** The findings indicated that *passion for teaching* (50 percent) and *enjoying children* (50 percent) were the two most important reasons for being and remaining a teacher. These two reasons are considered part of the interpersonal theme of teaching. As discussed earlier in Chapter I, this is the reason that many teachers teach. Teachers that teach for these reasons do so with little regard for money. They do so for the pure satisfaction of helping others. As professional as teachers may be, *summers off* (45 percent) ranked very high as a reason for remaining in the teaching field. Many believe that until the teaching profession is a year around

profession, it will never be fully recognized as a true profession. Teachers are fortunate to have very good coverage as far as health care, insurance, and investment opportunities. This is why *Benefits* (27 percent) was a contributing reason to stay in teaching. Administrative support, salary, working with technology, free time, and limited responsibility were included in reasons why teachers remained in the teaching profession.

The second goal asked, ***What are the reasons that technology education teachers leave the teaching field?*** Since most of the technology education graduates had remained in the teaching profession, the responses for this goal was very low. Teachers that had left or were planning to leave chose *low salary* (23 percent) as being the biggest reason for leaving teaching. It is no secret what type of salary teachers earn. Teachers know going in what they will make and what they are capable of making later on in the profession. Salary is often times an excuse for other problems found in the working environment. *Lack of administrative support* (27 percent) and *not enough room for advancement* (27 percent) were also chosen. Several other reasons were chosen for leaving the teaching profession with very low rankings.

Research goal three asked, ***What career paths are former technology education teachers pursuing?*** Findings showed that 73 percent of former technology education graduates were still involved in the teaching profession. This means that only 27 percent of former graduates apply to this situation. Seven career areas were shown chosen as alternate career paths that former

graduates were taking. These were: sales jobs, military of government jobs, computer oriented jobs in business, trucking, security, or graduate school.

The forth goal asked, ***What improvements can be made to retain Old Dominion University technology education students in the education field?*** Respondents provided 23 different suggestions which included:

1. Deal more with real students
2. Learn procedures to order supplies
3. Learn how to keep records for equipment
4. More computer experience
5. More on how to be a teacher, less emphasis on subject content
6. How to adapt curriculum for exceptional students
7. More attention to designated middle and high school courses
8. Strengthen interview skills
9. Improve job search skills
10. More hands-on, less lecture
11. Update methods class
12. Lengthen student teaching (more practical experience)
13. Update curriculum to better match school programs taught
14. How to manage students in a modular lab situation
15. Better preparation for National Teachers Exam
16. More electronics experience
17. Graduates leave knowing too little, about too much
18. Prepare for Technology Student Association involvement
19. Prepare for paper work that teachers will encounter
20. Stress classroom management skills
21. Produce usable lesson plans
22. Require more math for major
23. Include more engineering concepts

The main suggestion that can be gathered from this list is that technology education students need more preparation on how to be teachers and less on what to teach. Concepts such as administrative duties and dealing with student needs - - need more attention. Certain areas of content also needed improvement or should be added as part of the technology education major.

Recommendations

Based on the findings and the conclusions of this study, the following recommendations are made to help retain technology education graduated in the teaching profession:

Implementing Findings

1. The Old Dominion University technology education program should include instruction on administrative duties such as: paperwork, ordering supplies, and keeping records.
2. The Old Dominion University technology education program should study the workings of the Technology Student Association (TSA).
3. The Old Dominion University technology education program should focus more attention to the three middle school courses and the three high school course mandated by the state.
4. The Old Dominion University technology education program should require more math, science, and engineering preparation as part of the major.
5. The Old Dominion University technology education program should prepare teachers to manage students in a modular lab situation.
6. The Old Dominion University technology education program should provide students with information on how to advance in education through masters programs, doctorate programs, and administration.

Suggestions for Additional Research

1. A study of job satisfaction of former Old Dominion University technology education graduates.
2. A study of Old Dominion University technology education students to determine their attitude toward the teaching profession.

3. A study of technology education college professors to determine their attitudes toward the middle school and high school technology teacher profession.
4. A study to determine how school administrators and principals rank technology education in order of importance compared to the other school subjects offered.

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APPENDICES

Appendix A. Sample of the Survey Questionnaire

Appendix B. Sample of the Cover Letter

Appendix C. Sample of the Follow-up Letter

APPENDIX A

Sample of the Survey Questionnaire

APPENDIX A

***A Study of
Old Dominion University
Technology Education Graduates
1983 - 1993***

Purpose: This survey is designed to provide specific information concerning the career paths of Old Dominion University Technology Education graduates.

Directions: Please mark your answers on the survey. To answer a question, fill in the appropriate bubble, and/or provide written answers when asked. Do not provide your name, each survey has been coded for follow-up purposes.

1. **What is your sex?**
☐ Male
☐ Female
2. **What is your age?**
☐ 30 or less ☐ 41-50 ☐ over 60
☐ 31-40 ☐ 51-60
3. **Are you married?**
☐ Yes
☐ No
4. **Do you live in Virginia?**
☐ Yes
☐ No
5. **What is the highest level of education you have completed?**
☐ Bachelor
☐ Masters
☐ Doctorate
☐ Other _____
6. **How many years have you been teaching, or did you teach?**
☐ 0 ☐ 5 ☐ 10
☐ 1 ☐ 6
☐ 2 ☐ 7
☐ 3 ☐ 8
☐ 4 ☐ 9
7. **Please indicate any of the reasons listed below that contribute to your remaining a technology education teacher:**
☐ Salary ☐ Limited responsibility
☐ Summers off ☐ Passion for teaching
☐ Free time ☐ Administrative support

Appendix A (cont.)

- ☐ Benefits
 ☐ Enjoy children
☐ other _____
☐ other _____
☐ other _____

8. **If you have left the teaching profession for another profession or plan on leaving the teaching profession, what are/were the reasons for your decision to leave?**

- ☐ Salary
 ☐ Lack of administrative support
☐ Not enough free time
 ☐ Dislike children
☐ Lack of benefits
 ☐ Too much responsibility
☐ Dislike teaching
 ☐ Not enough room for advancement
☐ other _____
☐ other _____
☐ other _____

9. **If you have exited the teaching profession or have never taught, please provide your present occupation and all previous occupations since graduation.**

1. _____
 2. _____
 3. _____
 4. _____

10. **Would you recommend the teaching profession to someone entering college?**

- ☐ Yes
☐ No

Why? _____

11. **Did the Old Dominion University Technology Education program adequately prepare you for the teaching profession?**

- ☐ Yes
☐ No

12. **What areas of technology teacher preparation need to be improved in the Old Dominion University program? Why?**


APPENDIX B

Sample of the Cover Letter

APPENDIX B

***A Study of
Old Dominion University
Technology Education Graduates
1983 - 1993***

June 7, 1994

Conducted by  William L. Lucas, Jr.
1006 Westmoreland Ave.
Apt. 226
Norfolk, VA 23508
(804) 489-8149

Dear <<addressee>>,

As a former graduate of Old Dominion University in Technology Education, I am seeking your assistance in a study to determine the percentage of Technology Education graduates who are still involved in the education field. This study is an important part of my masters program at Old Dominion University and its results will be beneficial to future Technology Education graduates.

Your response to this survey is very critical to its success. With the results I hope to determine what changes can be made to better retain Old Dominion University technology education students in the education field. I am asking you to take a few minutes of your time to help me with this study. Your participation will be kept anonymous.

Please respond and return the questionnaire in the self-addressed stamped envelope provided by **Wednesday, June 15, 1994**. If you have any questions regarding the study, please call me at the phone number listed above.

Thank you very much for taking the time to participate!

Sincerely,

William L. Lucas, Jr.

APPENDIX C

Sample of the Follow-up Letter

APPENDIX C

***A Study of
Old Dominion University
Technology Education Graduates
1983 - 1993***

June 17, 1994

Dear Graduate,

Recently you received a survey and were asked to participate in my research project concerning Old Dominion University technology education graduates. If you have already returned it, I would like to thank you for your help. This study would not be possible without your participation.

If you have not completed and returned the survey, please take a few minutes and do so. I have had a very low response rate so far. **I need your help in order to complete my study.**

Many Thanks!

William L. Lucas, Jr.